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| <b>(51) International Patent Classification</b> <sup>6</sup> :<br>C12Q 1/68  | <b>A3</b> | <b>(11) International Publication Number:</b> WO 97/20197<br><b>(43) International Publication Date:</b> 5 June 1997 (05.06.97)   |
| <b>(21) International Application Number:</b> PCT/GB96/02959<br><b>(22) International Filing Date:</b> 29 November 1996 (29.11.96)<br><b>(30) Priority Data:</b><br>9524381.2 29 November 1995 (29.11.95) GB<br><b>(71) Applicant (for all designated States except US):</b> THE ANTHONY NOLAN BONE MARROW TRUST [GB/GB]; The Royal Free Hospital, Pond Street, Hampstead, London NW3 2QG (GB).<br><b>(72) Inventors; and</b><br><b>(75) Inventors/Applicants (for US only):</b> ARGUELLO, Rafael [MX/GB]; The Anthony Nolan Bone Marrow Trust, The Royal Free Hospital, Pond Street, Hampstead, London NW3 2QG (GB). AVAKIAN, Hovanes [GB/GB]; The Anthony Nolan Bone Marrow Trust, The Royal Free Hospital, Pond Street, Hampstead, London NW3 2QG (GB). MADRIGAL, Alejandro [MX/GB]; The Anthony Nolan Bone Marrow Trust, The Royal Free Hospital, Pond Street, Hampstead, London NW3 2QG (GB).<br><b>(74) Agent:</b> CAMPBELL, Patrick, John, Henry; J. A. Kemp & Co., 14 South Square, Gray's Inn, London WC1R 5SLX (GB). |           | <b>(81) Designated States:</b> AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, ARIPO patent (KE, LS, MW, SD, SZ, UG), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).<br><br><b>Published</b><br><i>With international search report.</i><br><i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i><br><br><b>(88) Date of publication of the international search report:</b> 26 June 1997 (26.06.97) |
| <b>(54) Title:</b> METHOD FOR IDENTIFYING AN UNKNOWN ALLELE<br><br><b>(57) Abstract</b><br><br>The invention provides a method for identifying an unknown allele of a polyallelic gene, which method comprises (i) contacting the unknown allele with a panel of probes, each of which recognises a sequence motif that is present in some alleles of the polyallelic gene but not in others; (ii) observing which probes recognise the unknown allele so as to obtain a fingerprint of the unknown allele; and (iii) comparing the fingerprint with fingerprints of known alleles. The use of a panel of probes which each recognises a different motif allows identification of which motifs are present in the unknown allele. The alleles of the polyallelic gene each have a unique combination of motifs and so identification of this combination (or "fingerprint") leads to identification of the unknown allele.   |           |   |

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# INTERNATIONAL SEARCH REPORT

International Application No

PC1/GB 96/02959

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 6 C12Q1/68

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 C12Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

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| Category | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No. |
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## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No.

PCT/GB 96/02959

| Patent document<br>cited in search report | Publication<br>date | Patent family<br>member(s) | Publication<br>date |
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